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| | | | | Application Number | 10/562,202 |
| | | | | Filing Date | |
| | | | | First Named Inventor | HONMOU et al. |
| | | | | Group Art Unit | Unassigned |
| | | | | Examiner Name | Unassigned |
| | | | | Attorney Docket Number | 038873-0108 |
| Sheet | 1 | of | 11 | | |

| U.S. PATENT DOCUMENTS | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | | |
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| | | Office ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| /SL/ | B1 | WO | 03/038075 | A1 | Renomedix Institute Inc. | 05/08/2003 | | |
| /SL/ | B2 | WO | 02/00849 | A1 | Hokkaido Technology Licensing Office Co., Ltd. | 01/03/2002 | | |

| NON PATENT LITERATURE DOCUMENTS | | | | |
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| /SL/ | B3 | AGGARWAL, <i>et al.</i> , "Human mesenchymal stem cells modulate allogeneic immune cell responses", Blood, Vol. 105, Number 4, pp. 1815-1822, (2005). | | |
| | B4 | AKIYAMA, <i>et al.</i> , "Transplantation of Clonal Neural Precursor Cells Derived from Adult Human Brain Establishes Functional Peripheral Myelin in the Rat Spinal Cord", Experimental Neurology, Vol. 167, pp. 27-39 (2001). | | |
| | B5 | ARCHER, <i>et al.</i> , "Myelination by Cryopreserved Xenografts and Allografts in the Myelin-Deficient Rat", Experimental Neurology, Vol. 125, pp. 268-277 (1994). | | |
| | B6 | AUNER, <i>et al.</i> , "Evaluation of potential risk factors for early infectious complications after autologous peripheral blood stem cell transplantation in patients with lymphoproliferative diseases", Ann Hematol, Vol. 84, pp. 532-537 (2005). | | |
| | B7 | BANG, <i>et al.</i> , "Autologous Mesenchymal Stem Cell Transplantation in Stroke Patients", Ann Neurol, Vol. 57, pp. 874-882 (2005). | | |
| | B8 | BARKER, <i>et al.</i> , "Acute Stroke: Evaluation with Serial Proton MR Spectroscopic Imaging", Radiology, Vol. 192, pp. 723-732 (1994). | | |
| | B9 | BEDERSON, <i>et al.</i> , "Evaluation of 2, 3, 5-Triphenyltetrazolium Chloride as a Stain for Detection and Quantification of Experimental Cerebral Infarction in Rats", Stroke, Vol. 17, No. 6, pp. 1304-1308 (1986). | | |
| ↓ | B10 | BENDER, <i>et al.</i> , "Identification and Comparison of CD34-Positive Cells and Their Subpopulations From Normal Peripheral Blood and Bone Marrow Using Multicolor Flow Cytometry", Blood, Vol. 77, No. 12, pp. 2591-2596 (1991). | | |

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| /SL/ | B11 | BERNSTEIN, <i>et al.</i> , "Suppression of Human Cytotoxic T Lymphocyte Responses by Adherent Peripheral Blood Leukocytes", Annals New York Academy of Science, Vol. 532, pp. 206-213 (1988). | |
| | B12 | BJORNSON, <i>et al.</i> , "Turning Brain into Blood: A Hematopoietic Fate Adopted by Adult Neural Stem Cells in Vivo", Science, Vol. 283, pp. 534-537 (1999). | |
| | B13 | BLAKEMORE, <i>et al.</i> , "Extensive Oligodendrocyte Remyelination following Injection of Cultured Central Nervous System Cells into Demyelinating Lesions in Adult Central Nervous System", Dev. Neurosci., Vol. 10, pp. 1-11 (1988). | |
| | B14 | WIESEL, <i>et al.</i> , "Remyelination of CNS axons by Schwann cells transplanted from the sciatic nerve", Nature, Vol. 266, p. 68-69, (1977). | |
| | B15 | Brown, <i>et al.</i> , "Factors That Influence the Collection and Engraftment of Allogeneic Peripheral-Blood Stem Cells in Patients With Hematologic Malignancies", Journal of Clinical Oncology, Vol. 15, No. 9, pp. 3067-3074 (1997). | |
| | B16 | CHALMERS-REDMAN, <i>et al.</i> , "IN VITRO Propagation And Inducible Differentiation of Multipotential Progenitor Cells From Human Fetal Brain", Neuroscience, Vol. 76, No. 4, pp. 1121-1128 (1997). | |
| | B17 | CHEN, <i>et al.</i> , "Therapeutic benefit of intracerebral transplantation of bone marrow stromal cells after cerebral ischemia in rats", Journal of the Neurological Sciences, Vol. 189, pp. 49-57 (2001). | |
| | B18 | CHOPP, <i>et al.</i> , "Spinal cord injury in rat: treatment with bone marrow stromal cell transplantation", NeuronReport, Vol. 11, No. 13, pp. 3001-3005 (2000). | |
| | B19 | DESHARI, <i>et al.</i> , "Enhanced antitumor effect of RGD fiber-modified adenovirus for gene therapy of oral cancer", Cancer Gene Therapy, Vol. 10, pp. 75-85 (2003). | |

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| /SL/ | B20 | ESCOLAR, <i>et al.</i> , "Transplantation of Umbilical-Cord Blood in Babies with Infantile Krabbe's Disease", The New England Journal of Medicine", pp. 2069-81 (2005). | | |
| | B21 | FLAX, <i>et al.</i> , "Engraftable human neural stem cells respond to developmental cues, replace neurons, and express foreign genes", Nature Biotechnology, Vol. 16, pp. 1033-1039 (1988). | | |
| | B22 | FRANKLIN, <i>et al.</i> , "Schwann Cell-Like Myelination Following Transplantation of an Olfactory Bulb-Ensheathing Cell Line Into Areas of Demyelination in the Adult CNS", GLIA, Vol. 17, pp. 217-224 (1996). | | |
| | B23 | FRIEDENSTEIN, A.J., "Precursor Cells of Mechanocytes", International Review of Cytology, 1976, vol. 47, pp. 327-359. | | |
| | B24 | GAGE, <i>et al.</i> , "Survival and differentiation of adult neuronal progenitor cells transplanted to the adult brain", Proc. Natl. Acad. Sci., Vol. 92, pp. 11879-11883 (1995). | | |
| | B25 | GAVRIELI, <i>et al.</i> , "Identification of Programmed Cell Death In Situ via Specific Labeling of Nuclear DNA Fragmentation", The Journal of Cell Biology, Volume 119, No. 3, pp. 493-501 (1992). | | |
| | B26 | GOTO, <i>et al.</i> , "GABA Receptor Agonist Promotes Reformation of the Striatonigral Pathway by Transplant Derived from Fetal Striatal Primordia in the Lesioned Striatum", Experimental Neurology, Vol. 147, pp. 503-509 (1997). | | |
| ↓ | B27 | GUMPEL, <i>et al.</i> , "Transplantation of Human Embryonic Oligodendrocytes into Shiverer Brain", Annals New York Academy of Sciences, Vol. 495, pp. 70-85 (1987). | | |

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| /SL/ | B28 | HAMANO, <i>et al.</i> , "Angiogenesis Induced by the Implantation of Self-Bone Marrow Cells: A New Material for Therapeutic Angiogenesis", Cell Transplantation, Vol. 9, pp. 439-443 (2000). | | | |
| | B29 | HAYASHI, <i>et al.</i> , "Reduction of Ischemic Damage by Application of Vascular Endothelial Growth Factor in Rat Brain After Transient Ischemia", Journal of Cerebral Blood Flow and Metabolism, Vol. 18, pp. 887-895 (1998). | | | |
| | B30 | HIROUCHI <i>et al.</i> , "Current state on development of neuroprotective agents for cerebral ishemia," Folia Pharmacol. Jpn., Vol. 120, pp. 107-113 (2002). | | | |
| | B31 | HONMA, <i>et al.</i> , Intravenous infusion of immortalized human mesenchymal stem cells protects against injury in a cerebral ischemia model in adult rat",. Experimental Neurology, pp. 1-11 (2005). | | | |
| | B32 | HONMOU, <i>et al.</i> , "Restoration of Normal Conduction Properties in Demyelinated Spinal Cord Axons in the Adult Rat by Transplantation of Exogenous Schwann Cells", The Journal of Neuroscience, Vol. 16, pp. 3199-3208 (1996). | | | |
| | B33 | HUSS, <i>et al.</i> , "Evidence of Peripheral Blood-Derived, Plastic-Adherent CD34 ^{low} Hematopoietic Stem Cell Clones with Mesenchymal Stem Cell Characteristics", Stem Cells, Vol., 18, pp. 252-260 (2000). | | | |
| | B34 | Iihoshi, <i>et al.</i> , "A therapeutic window for intravenous administration of autologous bone marrow after cerebral Ischemia in adult rats", Brain Research, Vol. 1007, pp. 1-9 (2004). | | | |
| ↓ | B35 | IMAIZUMI, <i>et al.</i> , "Transplanted Olfactory Ensheathing Cells Remyelinate and Enhance Axonal Conduction in the Demyelinated Dorsal Columns of the Rat Spinal Cord", The Journal of Neuroscience, Vol. 18, pp. 6176-6185 (1998). | | | |

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| /SL/ | B36 | INOUE et al., "Comparative Analysis of Remyelinating Potential of Focal and Intravenous Administration of Autologous Bone Marrow Cells Into the Rat Demyelinated Spinal Cord," GLIA, 2003, pp. 111-118, Vol. 44. | | |
| | B37 | IWADATE et al., "Induction of Immunity in Peripheral Tissues Combined with Intracerebral Transplantation of Interleukin-2-producing Cells Eliminates Established Brain Tumors," Cancer Research, Dec. 15, 2001, pp. 8769-8774, Vol. 61. | | |
| | B38 | KANEAGE et al., "Efficient gene activation in mammalian cells by using recombinant adenovirus expressing site-specific Cre recombinase," Nucleic Acids Research, 1995, pp. 3816-3821, Vol. 23, No. 19. | | |
| | B39 | KATO et al., "Transplantation of Human Olfactory Ensheathing Cells Elicits Remyelination of Demyelinated Rat Spinal Cord," GLIA, 2000, pp. 209-218, Vol. 30. | | |
| | B40 | KAWANO et al., "Ex vivo expansion of human umbilical cord hematopoietic progenitor cells using a coculture system with human telomerase catalytic subunit (<i>hTERT</i>)—transfected human stromal cells," Blood, Jan. 15, 2003, pp. 532-540, Vol. 101, No. 2. | | |
| | B41 | KEIRSTEAD et al., "Polysialylated Neural Cell Adhesion Molecule-Positive CNS Precursors Generate Both Oligodendrocytes and Schwann Cells to Remyelinate the CNS after Transplantation," J. Neurosci., Sept. 1, 1999, pp. 7529-7536, Vol. 19, No. 17. | | |
| | B42 | KOBUNE et al., "Telomerized human multipotent mesenchymal cells can differentiate into hematopoietic and cobblestone area-supporting cells," Experimental Hematology, 2003, pp. 715-722, Vol. 31, Elsevier Inc. | | |
| ↓ | B43 | KOÇ et al., "Allogeneic mesenchymal stem cell infusion for treatment of metachromatic leukodystrophy (MLD) and hurler syndrome (MPS-IH), Bone Marrow Transplantation, 2002, pp. 215-222, Vol. 30. | | |

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| /SL/ | B44 | KOÇ et al., "Rapid Hematopoietic Recovery After Coinfusion of Autologous-Blood Stem Cells and Culture-Expanded Marrow Mesenchymal Stem Cells in Advanced Breast Cancer Patients Receiving High-dose Chemotherapy," J. Clin. Oncol., 2000, pp. 307-316, Vol. 18, No. 2. | | | |
| | B45 | KOPEN et al., "Marrow stromal cells migrate throughout forebrain and cerebellum, and they differentiate into astrocytes after injection into neonatal mouse brains," Proc. Natl. Acad. Sci., Sept. 1999, pp. 10711-10716, Vol. 96, USA. | | | |
| | B46 | KUROZUMI et al., "BDNF Gene-Modified Mesenchymal Stem Cells Promote Functional Recovery and Reduce Infarct Size in the Rat Middle Cerebral Artery Occlusion Model," Molecular Therapy, Feb. 2004, pp. 189-197, Vol. 9, No. 2. | | | |
| | B47 | LOIS et al., "Proliferating subventricular zone cells in the adult mammalian forebrain can differentiate into neurons and glia," Proc. Natl. Acad. Sci., Mar. 1993, pp. 2074-2077, Vol. 90, USA | | | |
| | B48 | LONGA et al., "Reversible Middle Cerebral Artery Occlusion Without Craniectomy in Rats," Stroke, January 1989, vol. 20, no. 1, pp. 84-91. | | | |
| | B49 | MAJUMDAR et al., "Phenotypic and Functional Comparison of Cultures of Marrow-Derived Mesenchymal Stem Cells (MSCs) and Stromal Cells," J. Cell. Physiol., 1998, pp. 57-66, Vol. 176. | | | |
| | B50 | J. MOKRY, "Experimental Models and Behavioural Tests Used in the Study of Parkinson's Disease," Physiol. Res., 1995, pp. 143-150, Vol. 44, No. 3. | | | |
| ↓ | B51 | R. MORRIS, "Spatial Localization Does Not Require the Presence of Local Cues," Learning and Motivation, 1981, pp. 239-260, Vol. 12. | | | |

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| | B53 | MOYER et al., "Culture, Expansion, and Transplantation of Human Fetal Neural Progenitor Cells," Transplantation Proceedings, 1997, pp. 2040-2041, Vol. 29, Elsevier. | | |
| | B54 | NAKAGAWA et al., "Persistent and Secondary Adenovirus-Mediated Hepatic Gene Expression Using Adenovirus Vector Containing CTLA4IgG," Hum.Gene Ther., Aug. 10, 1998, pp. 1739-1745, Vol. 9, No. 12, Mary Ann Liebert, Inc. | | |
| | B55 | NAKAMURA et al., "Effective Gene Transfer to Human Melanomas via Integrin-Targeted Adenoviral Vectors," Hum.Gene Ther., Mar. 20, 2002, pp. 613-626, Vol. 13. | | |
| | B56 | NAKAMURA et al., "Adoptive Immunotherapy with Murine Tumor-specific T Lymphocytes Engineered to Secrete Interleukin 2," Cancer Research, Nov. 15, 1994, pp. 5757-5760, Vol. 54, No. 22. | | |
| | B57 | NAMBA et al., "Evaluation of the Bystander Effect in Experimental Brain Tumors Bearing Herpes Simplex Virus-Thymidine Kinase Gene by Serial Magnetic Resonance Imaging," Hum. Gene Ther., Oct. 1, 1996, pp. 1847-1852, Vol. 7, No. 15, Mary Ann Liebert, Inc. | | |
| | B58 | NEUMANN-HAEFELIN et al., "Serial MRI After Transient Focal Cerebral Ischemia in Rats," Stroke, Aug. 2000, pp. 1965-1973. | | |
| ↓ | B59 | NIWA et al., "Efficient selection for high-expression transfectants with a novel eukaryotic vector," Gene, 1991, pp. 193-199, Vol. 108. | | |

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| | | Application Number | 10/562,202 |
| | | Filing Date | |
| | | First Named Inventor | HONMOU et al. |
| | | Group Art Unit | Unassigned |
| | | Examiner Name | Unassigned |
| | | Attorney Docket Number | 038873-0108 |
| Sheet | 8 | of | 11 |

| NON PATENT LITERATURE DOCUMENTS | | | |
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| /SL/ | B60 | NOMURA et al., "I.V. Infusion of Brain-Derived Neurotrophic Factor Gene-Modified Human Mesenchymal Stem Cells Protects Against Injury in a Cerebral Ischemia Model in Adult Rat," Neuroscience, 2005, pp. 161-169, Vol. 136. | |
| | B61 | NYBERG-HOFFMAN et al., "Sensitivity and reproducibility in adenoviral infectious titer determination," Nature Medicine, July 1997, pp. 808-811, Vol. 3, No. 7. | |
| | B62 | OHLSSON et al., "Environment Influences Functional Outcome of Cerebral Infarction in Rats," Stroke, Apr. 1995, pp. 644-649, Vol. 26, No. 4. | |
| | B63 | PAXINOS et al., "Bregma, lambda and the interaural midpoint in stereotaxic surgery with rats of different sex, strain and weight," J. Neurosci. Methods, 1985, pp. 139-143, Vol. 13, Elsevier. | |
| | B64 | PLUCHINO et al., "Neurosphere-derived multipotent precursors promote neuroprotection by an immunomodulatory mechanism," Nature, July 14, 2005, pp. 266-271, Vol. 436. | |
| | B65 | PLUCHINO et al., "Injection of adult neurospheres induces recovery in a chronic model of multiple sclerosis," Nature, Apr. 17, 2003, pp. 688-694, Vol. 422. | |
| | B66 | PROCKOP et al., "One strategy for cell and gene therapy: Harnessing the power of adult stem cells to repair tissues," PNAS, Sept. 30, 2003, pp. 11917-11923, Vol. 100, Suppl. 1. | |
| | B67 | D. PROCKOP, "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues," Science, Apr. 4, 1997, pp. 71-74, Vol. 276. | |

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| /SL/ | B68 | REYNOLDS et al., "Generation of Neurons and Astrocytes from Isolated Cells of the Adult Mammalian Central Nervous System," Science, Mar. 27, 1992, pp. 1707-1710, Vol. 255. | | | |
| | B69 | RHINES et al., "Local Immunotherapy with Interleukin-2 Delivered from Biodegradable Polymer Microspheres Combined with Interstitial Chemotherapy: A Novel Treatment for Experimental Malignant Glioma," Neurosurgery, Apr. 2003, pp. 872-880, Vol. 52, No. 4. | | | |
| | B70 | ROCHEFORT et al., "Influence of hypoxia on the domiciliation of Mesenchymal Stem Cells after infusion into rats: possibilities of targeting pulmonary artery remodeling via cells therapies?" Respiratory Research, 2005, pp. 1-13, Vol. 6, No. 125. | | | |
| | B71 | SASAKI et al., "Protection of Corticospinal Tract Neurons After Dorsal Spinal Cord Transection and Engraftment of Olfactory Ensheathing Cells," GLIA, 2006, pp. 352-359, Vol. 53. | | | |
| | B72 | SASAKI et al., "Transplantation of an Acutely Isolated Bone Marrow Fraction Repairs Demyelinated Adult Rat Spinal Cord Axons," GLIA, 2001, pp. 26-34, Vol. 35. | | | |
| | B73 | STABA et al., "Cord-Blood Transplants from Unrelated Donors in Patients with Hurler's Syndrome," N. Engl. J. Med., May 6, 2004, pp. 1960-1969, Vol. 350, No. 19. | | | |
| | B74 | SVENDSEN et al., "Long-Term Survival of Human Central Nervous System Progenitor Cells Transplanted into a Rat Model of Parkinson's Disease," Experimental Neurology, 1997, pp. 135-146, Vol. 148, Article No. EN976634. | | | |
| | B75 | TAKIGUCHI et al., "CTLA4IgG Gene Delivery Prevents Autoantibody Production and Lupus Nephritis in MRL/lpr Mice," Life Sciences, 2000, pp. 991-1001, Vol. 66, No. 11, Elsevier. | | | |

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| /SL/ | B76 | TAMURA et al., "Focal cerebral infarction in the rat: I. Operative technique and physiological monitorings for chronic model," No To Shinkei, 1986, vol. 38, no. 8, pp. 747-751. | | |
| | B77 | TILLE et al., "Mesenchymal Cells Potentiate Vascular Endothelial Growth Factor-Induced Angiogenesis <i>in Vitro</i> ," Experimental Cell Research, 2002, pp. 179-191, Vol. 280. | | |
| | B78 | TOMA et al., "Human Mesenchymal Stem Cells Differentiate to a Cardiomyocyte Phenotype in the Adult Murine Heart," Circulation, Jan. 1/8, 2002, pp. 93-98. | | |
| | B79 | TONDREAU et al., "Mesenchymal Stem Cells Derived from CD133-Positive Cells in Mobilized Peripheral Blood and Cord Blood: Proliferation, Oct4 Expression, and Plasticity," Stem Cells, 2005, pp. 1105-1112, Vol. 23. | | |
| | B80 | TSUDA et al., "Efficient BMP2 Gene Transfer and Bone Formation of Mesenchymal Stem Cells by a Fiber-Mutant Adenoviral Vector," Mole. Therapy, Mar. 2003, pp. 354-365, Vol. 7, No. 3. | | |
| | B81 | UTZSCHNEIDER et al., "Transplantation of glial cells enhances action potential conduction of myelinated spinal cord axons in the myelin-deficient rat," Proc. Natl. Acad. Sci., Jan. 1994, pp. 53-57, Vol. 91, USA. | | |
| | B82 | VILLARON et al., "Mesenchymal stem cells are present in peripheral blood and can engraft after allogeneic hematopoietic stem cell transplantation," Haematologica, Dec. 2004, pp. 1421-1427, Vol. 89, No. 12. | | |
| ↓ | B83 | WILLING et al., "Mobilized Peripheral Blood Cells Administered Intravenously Produce Functional Recovery in Stroke," Cell Transplant., 2003, pp. 449-454, Vol. 12, USA. | | |

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| /SL/ | B84 | YANDAVA et al., "Global' cell replacement is feasible via neural stem cell transplantation: Evidence from the dysmyelinated shiverer mouse brain," Proc. Natl. Acad. Sci., June 1999, pp. 7029-7034, Vol. 96, USA. | | |
| | B85 | WOODBURY et al., "Adult Rat and Human Bone Marrow Stromal Cells Differentiate Into Neurons," J. Neurosci. Res., 2000, pp. 364-370, Vol. 61. | | |
| | B86 | YAMAUCHI et al., "Pre-administration of angiopoietin-1 followed by VEGF induces functional and mature vascular formation in a rabbit ischemic model," J. Gene Med., 2003, pp. 994-1004, Vol. 5. | | |
| | B87 | ZHANG et al., "Human bone marrow stromal cell treatment improves neurological functional recovery in EAE mice," Exper. Neurology, 2005, pp. 16-26, Vol. 195, Elsevier. | | |
| | B88 | ZVAIFLER et al., "Mesenchymal precursor cells in the blood of normal individuals," Arthritis Res., 2000, pp. 477-488, Vol. 2, No. 6. | | |

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Date Submitted: December 23, 2005

(use as many sheets as necessary)

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| Application Number | Unassigned |
| Filing Date | December 23, 2005 |
| First Named Inventor | Osamu HONMOU |
| Group Art Unit | Unassigned |
| Examiner Name | Unassigned |
| Attorney Docket Number | 033873-0108 |

Sheet 1 of 2

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| Examiner Initials* | Cite No. ¹ | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
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| /SL/ | A1 | | JP 2004-544234 A | | HENRY FORD HEALTH SYSTEM | 12/24/2002 | | |
| /SL/ | A2 | | WO 01/66698 A1 | | CRYO-CELL INT. INC. | 9/13/2001 | | |
| /SL/ | A3 | | WO 03/25167 A2 | | CENT TRANSLATIONAL RES IN CANCER | 3/27/2003 | | |

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| /SL/ | A4 | DATABASE BIOSIS ON STN, (Last Updated on Stn: 6/19/2003) abstract no. 200300283245 & S. IIHOSHI et al., "Intravenous administration of autologous bone marrow cells repairs the ischemic lesions in the rat middle cerebral artery occlusion model", Society for Neuroscience Abstract Viewer & Itinerary Planner, (2002), vol. 2002, abstract no. 237.8., http://sfn.scholarone.com | |
| | A5 | D. LU et al., "Adult bone marrow stromal cells administered intravenously to rats after traumatic brain injury migrate to brain and improve neurological outcome", Neuroreport, 2001, vol. 12, No. 3, pp. 559-563. | |
| | A6 | J. CHEN et al., "Therapeutic benefit of intravenous administration of bone marrow stromal cells after cerebral ischemia in rats", Stroke, 2001, Vol. 32, No. 4, pp. 1005-1011. | |
| | A7 | K. CHU et al., "Human neural stem cells can migrate, differentiate and integrate after intravenous transplantation in adult rats with transient forebrain ischemia", Neurosci. Lett., 6/5/2003, Vol. 343, No. 2, pp. 129-133. | |
| | A8 | Y. AKIYAMA et al., "Remyelination of the spinal cord following intravenous delivery of bone marrow cells", Glia., (2002), Vol. 39, pp. 229-236. | |

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| /SL/ | A9 | A. MAHMOOD et al., "Treatment of traumatic brain injury in female rats with intravenous administration of bone marrow stromal cells", Neurosurgery, 2002, vol. 49, no. 5, pp. 1196-1203. | |
| | A10 | DATABASE MEDLINE ON STN, (2002), abstract no. 2002333228 & D. LU et al., "Intravenous administration of human umbilical cord blood reduces neurological deficit in the rat after traumatic brain injury", Cell Transplant. (2002), Vol. 11, No. 3, pp. 275-281. | |
| | A11 | DATABASE BIOSIS ON STN, (2001), abstract no. 200100547979 & Y. AKIYAMA et al., "Remyelination of spinal cord axons by intravenous delivery of bone marrow cells", Society for Neuroscience Abstracts, 2001, Vol. 27, No. 2, pg. 1562. | |
| | A12 | DATABASE BIOSIS IN STN, (2003), abstract no. 200300315449 & P. LU et al., "Transplantation of bone marrow stromal cells (MSCS) and BDNF-transducer MSCS promotes robust axonal growth after spinal cord injury", Society for Neuroscience Abstract Viewer & Itinerary Planner, 2002, Vol. 202, abstract no. 634.11 http://sfn.scholarone.com . | |
| ↓ | A13 | MA KEANE-MOORE et al., "Human mesenchymal stem cells can be genetically modified to function as antigen presenting cells", Blood, (1998), Vol. 92, No. 10, suppl. 1, part 1 to 2, pg. 338A, Abstract #1388. | |
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| | | First Named Inventor | Osamu HONMOU |
| | | Art Unit | 3629 |
| | | Examiner Name | Unassigned |
| | | Attorney Docket Number | 033873-0108 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|--------------------------|--|--------------------------------|--|--|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| /SL/ | C1 | 2003/0161818 A1 | 08/28/2003 | Weiss et al. | |
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| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|--------------------------|--|--------------------------------|---|--|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Documents | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
| /SL/ | C2 | WO 99/01145 | 01/14/1999 | Osiris Therapeutics, Inc. | | |
| /SL/ | C3 | WO 01/005944 A1 | 01/25/2001 | University of Southern California | | |
| | | | | | | |

| NON PATENT LITERATURE DOCUMENTS | | | | |
|---------------------------------|-----------------------|--|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published. | | T ⁶ |
| /SL/ | C4 | KENNEA et al., "Perinatal applications of neural stem cells," Best Practice & Research Clinical Obstetrics and Gynaecology, 2004, 18(6), 977-994. | | |
| /SL/ | C5 | TOCCI et al., "Mesenchymal stem cell: use and perspectives," The Hematology Journal, 2003, 4, 92-96. | | |
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| Examiner Signature | /Scott Long/ | Date Considered | 08/06/2007 |
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| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: July 14, 2006 (use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | 10/562,202 |
| | | | | Filing Date | 6/25/2004 |
| | | | | First Named Inventor | Osamu HONMOU |
| | | | | Group Art Unit | Unassigned |
| | | | | Examiner Name | Unassigned |
| | | | | Attorney Docket Number | 033873-0108 |
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| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|-----------------------|----------------------|-----------------------------------|---|--|---|
| Examiner Initials* | Cite No. ¹ | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
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| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|-----------------------|-------------------------|---------------------|-----------------------------------|--|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Documents | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Office ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| /SL/ | C1 | JP | 2002-027983 | A | Applied Cell Biotechnologies, Inc. | 01/29/2002 | | A |
| /SL/ | C2 | JP | 2002-544234 | A | Henry Ford Health System | 12/24/2002 | | A |
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| /SL/ | C3 | The Hokkaido Shimibun, "Treatment of cerebral infarction with the patient's own bone-marrow stem cells collected in advance," Sapporo Medical University, July 7, 2003, one page (and English Translation, two pages). | | |
| /SL/ | C4 | "Gene therapy for rat glioma based on mesenchymal stem cell transplantation," Cancer Science, September 25-27, 2003, Proceedings of the 62 nd Annual Meeting of the Japanese Cancer Association, five pages including cover, table of contents, p. 325 and last page of publication (and English translation of p. 325, one page). | | |
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